

[0081] In step S1803, the word processing application program 403 reserves, in the memory, the area of the “main pane-information storage table” which stores information for forming the main pane of the Nth page from the document data file of the Nth page. That is, the word processing application program 403 reserves, in the RAM 202, a memory area calculated by multiplying the data amount necessary for one object by the number of objects contained in page data of the Nth page. The reserved area must be physically or logically continuous with a main pane-information storage table which has already been created.

[0082] In step S1804, the word processing application program 403 reserves, in the memory, the area of the “horizontal project pane-information storage table” which stores information for forming a horizontal project pane from the document information of the Nth page. That is, the word processing application program 403 reserves, in the RAM 202, a memory area calculated by multiplying the data amount necessary for one object by the number of objects contained in page data of the Nth page. The reserved area must be physically or logically continuous with a horizontal project pane-information storage table which has already been created.

[0083] In step S1805, the word processing application program 403 reserves, in the memory, the area of the “vertical project pane-information storage table” which stores information for forming a vertical project pane from the document information of the Nth page. That is, the word processing application program 403 reserves, in the RAM 202, a memory area calculated by multiplying the data amount necessary for one object by the number of objects contained in page data of the Nth page. The reserved area must be physically or logically continuous with a vertical project pane-information storage table which has already been created. The three information storage tables, i.e., the main pane-information storage table, horizontal projection pane-information storage table, and vertical projection pane-information storage table are called “pane-information storage tables” at once.

[0084] For efficient drawing processing, the word processing application program 403 prepares the three information storage tables in steps S1803 to S1805. However, the word processing application program 403 may construct two tables (horizontal and vertical projection pane-information storage tables) from the main pane-information storage table in drawing (previewing) all pages. In this case, the word processing application program 403 need not execute steps S1804 and S1805.

[0085] In step S1806, the word processing application program 403 sets the page number N and object information of page N loaded in step S1802 in the area reserved in step S1803 for the main pane-information storage table. That is, the word processing application program 403 stores a figure ID, X-coordinate, Y-coordinate, width, and height, and sets the selection flag to “OFF”.

[0086] In step S1807, the word processing application program 403 sets the page number N and object information of page N loaded in step S1802 in the area reserved in step S1804 for the horizontal projection pane-information storage table. That is, the word processing application program 403 stores a figure ID, X-coordinate, and Y-coordinate, and

sets the selection flag to “OFF”. The X-coordinate registered in the horizontal projection pane-information storage table expresses the X-coordinate of a horizontally projected image displayed in the horizontal projection pane tab area by using a coordinate system (coordinate system of the three-directional view 600) common to the main pane. For this reason, the Y-coordinate of one object in the main pane-information storage table can be directly copied, but no X-coordinate can be directly copied. The X-coordinate value is uniquely determined in correspondence with the page number. In the first embodiment, a horizontally projected image is displayed in the middle of the horizontal projection pane tab area in the horizontal direction. Letting N be the page number, Wm be the width of the main pane, and Wh be the width of the horizontal projection pane tab area, the X-coordinate value is given by $\{Wm + Wh \times (N - 1)\} + Wh/2$. Of course, this is merely an example.

[0087] In step S1808, the word processing application program 403 sets the page number N and object information of page N loaded in step S1802 in the area reserved in step S1805 for the vertical projection pane-information storage table. That is, the word processing application program 403 stores a figure ID, X-coordinate, and Y-coordinate, and sets the selection flag to “OFF”. The Y-coordinate registered in the vertical projection pane-information storage table expresses the Y-coordinate of a vertically projected image displayed in the vertical projection pane tab area by using a coordinate system common to the main pane. For this reason, the X-coordinate of one object in the main pane-information storage table can be directly copied, but no Y-coordinate can be directly copied. The Y-coordinate value is uniquely determined in correspondence with the page number. In the first embodiment, a vertically projected image is displayed in the middle of the vertical projection pane tab area in the vertical direction. Letting N be the page number, Hm be the height of the main pane, and Hv be the height of the vertical projection pane tab area, the Y-coordinate value is given by $\{Hm + Hv \times (N - 1)\} + Hv/2$. Needless to say, this is merely an example.

[0088] Pieces of information stored in the respective pane-information storage tables in steps S1806 to S1808 are the sizes, position coordinates, and figure IDs of various figures, and the page numbers of existing figures. The position of each figure is calculated as a position relative to the origin (e.g., the upper left corner of the main pane) of the three-directional view 600. The word processing application program 403 automatically generates a figure ID, and gives a unique value to one figure. Object information on one figure is stored together with a common figure ID in the main pane-information storage table, horizontal projection pane-information storage table, and vertical projection pane-information storage table. FIGS. 8A to 8C show examples of the pane-information storage tables after storing information in steps S1806 to S1808.

[0089] In step S1809, the word processing application program 403 checks whether the program counter N has reached the total page count of the document data file. If N does not reach the total page count in step S1809, the word processing application program 403 increments the program counter N by one in step S1810, and the flow returns to step S1802. The word processing application program 403